

Amendments to the Claims:

This listing of claims will replace all prior versions and listing of claims in the above-identified application

Listing of Claims:

- Sub E1
1. (Currently Amended) An apparatus comprising:
- a first plurality of electronic components defining an instant on mode of operation, said first plurality of electronic components being controlled by a first operating system capable of supporting execution of a first application program;
  - a second plurality of electronic components defining a non-instant on mode of operation, said second plurality of electronic components being controlled by a second operating system different from said first operating system;
  - a plurality of input/output devices capable of being used in conjunction with said first plurality of electronic components during said instant on mode of operation and with said second plurality of electronic components during said non-instant on mode operation, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and
  - one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.
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2. (Currently Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation;  
a second plurality of electronic components defining a non-instant on mode of operation;  
a plurality of input/output devices wherein said first plurality of electronic components includes a first processor to execute instructions representing a first operating system capable of supporting execution of a first application program and said second plurality of electronic components includes a second processor to execute instructions representing a second operating system different from said first operating system, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

3. (Currently Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation wherein said first plurality of electronic components includes a first processor to execute instructions representing a first operating system capable of supporting execution of a first application program;

a second plurality of electronic components defining a non-instant on mode of operation and including a second processor to execute instructions representing a second operating system different from said first operating system, wherein said first plurality of electronic components includes a first memory device and said second plurality of electronic components includes a

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second memory device, and wherein after start up said first and second processors operate simultaneously to synchronize data between said first and second memory devices;

a plurality of input/output devices, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components.

4. (Currently Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation;

a second plurality of electronic components defining a non-instant on mode of operation,

wherein at least one of said first and second plurality of electronic components includes a processor having at least two operating modes, wherein when in a first operating mode said processor executes instructions representing a first operating system capable of supporting execution of a first application program, and when in a second operating mode said processor executes instructions representing a second operating system different from said first operating system;

a plurality of input/output devices, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable

said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components

5. (Original) The apparatus of claim 1, wherein said one or more switching mechanisms includes a mechanical switch.

6. (Currently Amended) An apparatus comprising:

a first plurality of electronic components defining an instant on mode of operation, said first plurality of electronic components being controlled by a first operating system capable of supporting execution of a first application program;

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a second plurality of electronic components defining a non-instant on mode of operation, said second plurality of electronic components being controlled by a second operating system different from said first operating system;

a plurality of input/output devices, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input/output devices to one or more of said first plurality of electronic components and enable said apparatus to start up in said instant on mode of operation to the exclusion of said second plurality of electronic components, or to selectively couple said one or more input/output devices to one or more of said second plurality of electronic components and enable said apparatus to start up in said non-instant on mode of operation to the exclusion of said first plurality of electronic components wherein said one or more switching mechanisms includes a digital multiplexer.

7. (Original) The apparatus of claim 1, wherein said plurality of input and output devices include a keyboard and a display device.

8. (Currently Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation, said plurality of function blocks being controlled by a first operating system capable of supporting execution of a first application program;

a plurality of electronic components for use in a second non-instant on mode of operation, said plurality of electronic components being controlled by a second operating system different from said first operating system;

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a plurality of input and output devices capable of being used in conjunction with said plurality of function blocks during said first instant on mode of operation and with said plurality of electronic components during said second non-instant on mode operation, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components; or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

9. (Currently Amended) An apparatus comprising:

an integrated circuit having a first plurality of function blocks for use in a first instant on mode of operation wherein said first plurality of function blocks includes a first processor to

execute instructions representing a first operating system capable of supporting execution of a first application program;

a plurality of electronic components for use in a second non-instant on mode of operation, and wherein said second plurality of electronic components includes a second processor to execute instructions representing a second operating system different from said first operating system;

a plurality of input and output devices, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said first plurality of function blocks.

10. (Currently Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation wherein said plurality of function blocks includes a first processor to execute instructions representing a first operating system capable of supporting execution of a first application program;

a plurality of electronic components for use in a second non-instant on mode of operation wherein said second plurality of electronic components includes a second processor to execute instructions representing a second operating system different from said first operating system;

a plurality of input and output devices, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program

during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation;

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks; and

a connector interface to couple said one or more switching mechanisms to said integrated circuit.

11. (Currently Amended) An apparatus comprising:

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an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation wherein said plurality of function blocks includes a first memory device and a first processor to execute instructions representing a first operating system capable of supporting execution of a first application program;

a plurality of electronic components for use in a second non-instant on mode of operation wherein said second plurality of electronic components includes a second memory device and a second processor to execute instructions representing a second operating system different from said first operating system and wherein said first and second processors operate simultaneously to synchronize data stored within said first and second memory devices;

a plurality of input and output devices, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input

and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

12 (Currently Amended). An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in first instant on mode of operation;

a plurality of electronic components for use in a second non-instant on mode of operation wherein at least one of said plurality of function blocks and said plurality of electronic components includes a processor having at least two operating modes, wherein when in a first operating mode, said processor executes instructions representing a first operating system capable of supporting execution of a first application program during operation in said first instant on mode, and when in a second operating mode, said processor executes instructions representing a second operating system different from said first operating system;

a plurality of input and output devices, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.



13. (Original) The apparatus of claim 8, wherein said one or more switching mechanisms includes a mechanical switch.

14. (Currently Amended) An apparatus comprising:

an integrated circuit having a plurality of function blocks for use in a first instant on mode of operation, said plurality of function blocks being controlled by a first operating system capable of supporting execution of a first application program;

a plurality of electronic components for use in a second non-instant on mode of operation, said plurality of electronic components being controlled by a second operating system different from said first operating system;

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a plurality of input and output devices wherein said plurality of input and output devices includes a user input device and a display device, said plurality of input/output devices including a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation; and

one or more switching mechanisms to selectively couple one or more of said plurality of input and output devices to one or more of said function blocks to enable said one or more input and output devices to be available for use in said first instant on mode of operation to the exclusion of said plurality of electronic components, or to selectively couple said one or more of said plurality of input and output devices to one or more of said second plurality of electronic components to enable said one or more input and output devices to be available for use in said second non-instant on mode of operation to the exclusion of said plurality of function blocks.

15. (Original) The apparatus of claim 8, wherein said plurality of input and output devices include a user input device and a display device.

16. (Currently Amended) An apparatus comprising:

a first processor block to operate in a first instant on mode of operation under the control of a first operating system capable of supporting execution of a first application program;

a second processor block to operate in a second non-instant on mode of operation;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said one or more external devices include a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation.

17. (Currently Amended) An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation in accordance with a first operating system capable of supporting execution of a first application program;

a second processor block to operate in a second non-instant on mode of operation in accordance with a second operating system different from said first operating system;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said plurality of external devices includes a user input device and a display device wherein said user input device is disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation.

18. (Currently Amended) An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation, said first processor block executing a first operating system capable of supporting execution of a first application program;

a second processor block to operate in a second non-instant on mode of operation, said second processor block executing a second operating system different from said first operating system;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said non instant on mode of operation to the exclusion of said first processor block wherein said one or more external devices includes a first memory device and a second memory device, and wherein after start up said first and second processor blocks operate simultaneously to synchronize data between said first and second memory devices wherein said one or more external devices include a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation.

19. (Original) The integrated circuit of claim 16, wherein said one or more switching mechanisms includes a mechanical switch.

20 (Currently Amended). An integrated circuit comprising:

a first processor block to operate in a first instant on mode of operation, said first processor block executing a first operating system capable of supporting execution of a first application program;

a second processor block to operate in a second non-instant on mode of operation, said second processor block executing a second operating system;

a plurality of input/output ports; and

one or more switching mechanisms to selectively couple one or more external devices to said first processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said first instant on mode of operation to the exclusion of said second processor block, or to selectively couple said one or more external devices to said second processor block through at least one of said plurality of input/output ports to facilitate use of said one or more external devices in said second non-instant on mode of operation to the exclusion of said first processor block wherein said one or more switching mechanisms includes a digital multiplexor and wherein said one or more external devices include a first input device disposed to receive user input processed by said first application program during operation in said instant on mode of operation and additional user input processed by a second application program during operation in said non-instant on mode of operation.

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21. (New) The apparatus of claim 1 wherein at least one of said plurality of input/output devices displays output generated by said first application program during operation in said instant on mode of operation and other output generated as a result of execution of said second application program during operation in said non-instant on mode of operation.

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22. (New) The apparatus of claim 2 wherein at least one of said plurality of input/output devices displays output generated by said first application program during operation in said instant on mode of operation and other output generated as a result of execution of said second application program during operation in said non-instant on mode of operation.

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23. (New) The apparatus of claim 3 wherein at least one of said plurality of input/output devices displays output generated by said first application program during operation in said instant on mode of operation and other output generated as a result of execution of said second application program during operation in said non-instant on mode of operation.

- ~~23.~~ (New) The apparatus of claim 4 wherein at least one of said plurality of input/output devices displays output generated by said first application program during operation in said instant on mode of operation and other output generated as a result of execution of said second application program during operation in said non-instant on mode of operation.
24. (New) The apparatus of claim 6 wherein at least one of said plurality of input/output devices displays output generated by said first application program during operation in said instant on mode of operation and other output generated as a result of execution of said second application program during operation in said non-instant on mode of operation.
25. (New) The apparatus of claim 8 wherein at least one of said plurality of input and output devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.
26. (New) The apparatus of claim 9 wherein at least one of said plurality of input and output devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.
27. (New) The apparatus of claim 10 wherein at least one of said plurality of input and output devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.
28. (New) The apparatus of claim 11 wherein at least one of said plurality of input and output devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.

29. (New) The apparatus of claim 12 wherein at least one of said plurality of input and output devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.

30. (New) The apparatus of claim 14 wherein at least one of said plurality of input and output devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.

31. (New) The apparatus of claim 16 wherein at least one of said one or more external devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.

32. (New) The integrated circuit of claim 17 wherein at least one of said one or more external devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.

33. (New) The integrated circuit of claim 18 wherein at least one of said one or more external devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.

34. (New) The integrated circuit of claim 20 wherein at least one of said one or more external devices displays output generated by said first application program during operation in said first instant on mode of operation and other output generated as a result of execution of said second application program during operation in said second non-instant on mode of operation.

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